An increasing number of educators are moving away from didactic, lecture-based models of instruction. (Barab, 2001) Some of the applications and their amazing and successful impact on the world around us will be discussed. Many may feel that resources could be utilized elsewhere to help improve the seriousness of the global problems our world is experiencing. The following paper will site many examples of Virtual Technologies that have improved the quality of people’s lives tremendously.

Learning can be “conceived as a social process in which meaning is negotiated, goals emerge from social processes, and success is taken in context. (Barab, 2001) This might lead one to think that learning may be facilitated by social interactions. This theory was studied by Barab, and the data certainly supports that social interaction does facilitate knowledge acquisition. They specially investigated the impact of Virtual Reality learning mechanisms. The technologies were environmentally rich. The technology could be immersive where the student would actually wear a headset or a two dimensional window gave the student access to a three dimensional world.

Barab quotes the legendary John Dewey, “We are so accustomed to the separation of knowledge from doing and making that we fail to recognize how it controls our conceptions of mind, consciousness, and inflective inquiry. “ The author goes on to state that “knowing and doing are inexplicably linked and should be treated this way.” Barab places a tremendous emphasis on the “social negotiation of practice” and examined the importance of these social interactions while groups worked together to complete a task. One of the benefits of the Virtual Worlds learning environment is that it allows for these social interactions to occur, even though the students may live geographically far apart.

There are many valuable experiences provided to students by these virtual technologies that they would not have any access to in a real world or classroom setting. As stated in “Communication and Collaboration in Virtual Worlds Facilitated Education.” Students can participate in virtual frog dissections, relieving them from the problems associated with real-time dissections. The paper also mentions the student’s ability to explore places such as the Sistine Chapel, Dante’s Inferno, and Egyptian Pyramids. Once again, these three dimensional virtual worlds provide excellent resources and experiences that would not be possible. These educational virtual environments allow the students to participate in experiences that could otherwise be dangerous or unsafe. (Leronutti & Chittaro, 2007)

An excellent example of the wonderful uses of Second Life and other Virtual Worlds was described by a study at the University of Texas. (Mangan, 2008) Students with autism were able to learn social rules and conduct by interacting with one another in a virtual environment. Social skills are often quite difficult for autistic individuals to acquire. Other researchers have conducted another study for students with autism spectrum disorders. (Parsons, S., Leonard, A., & Mitchell, P. , 2006) They also found that the students were able to learn and practice their social skills in an environment like Second Life. It is an excellent example of the contributions that these technologies have created in the quality of people’s lives.

Mangan also states that researchers at Dallas conducted brain-imaging and neurocognitive tests on several patients before and after being exposed to a Virtual World. The results showed improvement in the patients’ social appropriateness. Zachary Rosenthal, director of the Cognitive Behavioral Research and Treatment program at Duke University stated that Virtual Worlds are becoming far more popular as a treatment program at many academic medical centers. These patients with Asperger’s syndrome are often very uncomfortable during social interactions. Virtual Worlds allow these patients to interact with other avatars. Matt Kratz, a 35 year old graduate student stated that he feels more prepared to interact with the real world after therapy sessions where a Virtual World setting was utilized. These examples all support that the time, energy, and money spent developing technologies is having a direct and important influence on the quality of people’s lives and futures. Helping handicapped people lead better lives is directly ameliorating to some very serious global issues, such as our inability to communicate effectively with impaired people.

Walsh, founder of the non-profit organization called Immersive Education, showcased his technology and ideas for creating Virtual World educational tools at Harvard University .(Foster, 2007) His plan was to utilize three dimensional graphics, web cameras, telephony, and other multi – media devices. It was well-received and has an impressive list of backers from industry and academics including Amherst College, Columbia University, Massachusetts Institute of Technology, NASA, Sun Microsystems, and many other well-respected industries and universities. Students at Emerson College and Boston residents have been using Virtual World Technologies for social and civic change. They have used Virtual Worlds, like Second Life, to create real places including a new park in Boston near the Harvard Campus and subway changes in the city to include tours of the city. Once again, these are examples of how useful and powerful these tools have the potential to be.

The US Department of Education estimates that by the year 2010, sixty-nine percent of all jobs will require some form of training. It states that online learning techniques have the ability to save employers money. It is estimated that training times can be reduced and money spent on travel could be saved. A figure of 300,000 dollars annually was suggested. These saving could mean that more people could be employed each year. This is a very relevant and important piece of information especially during this difficult economy.

There are other benefits to students who have the ability to interact with distance learning technologies such as BlackBoard, Moodle, and Virtual World. These are the ability to engage in asynchronous learning as well as synchronous learning. (Stevens, 2006) Students who live in rural areas without proper transportation now have the opportunity to experience higher education. Adult students with busy lives also have the opportunity to work at their own pace. The synchronous learning environment can give the student a sense of community.

As with all technologies there are pros and cons. The positive features of this new learning paradigm are numerous. People who like to feel connected to other students and their teachers in a traditional learning environment may feel confused or uncomfortable interacting with the technology. (Grensing-Pophal, 2001) It has also been suggested that these Virtual World environments may cause students from other cultures to be confused about culturally acceptable behavior. Body and visual clues are not developed enough yet to be helpful to those who may be struggling with learning a new culture’s socially acceptable behaviors. (Connor, 2003)

There are many examples of the usefulness of Virtual World technologies like Second Life. It certainly appears that it is well worth the resources to continue to develop new forms of presenting information to students. These technologies have already improved the quality of life for many people and have been utilized in creative and resourceful manners. As people embrace these technologies and overcome their fear of change and learn to master the technology it would seem that the use of the technologies will only continue to grow.

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